DOCUMENT RESUME

ED 258 633 JC 850 346

AUTHOR	Muraski, Ed J.; Barker, Cherie
TITLE	An Employer Needs Assessment for Vocational Education: Palomar Community College District.
INSTITUTION	Palomar Community Coll. District, San Marcos, CA.
PUB DATE	May 84
NOTE	59p.
PUB TYPE	Reports - Research/Technical (143) -- Tests/Evaluation Instruments (160)
EDRS PRICE	MF01/PC03 Plus Postage.
DESCRIPTORS	Community Colleges; Community Surveys; *Educational Needs; *Employer Attitudes; Employment Projections; Employment Qualifications; *Job Training; Occupational Information; Questionnaires; Two Year Colleges; *Vocational Education

ABSTRACT

A study was conducted to determine the employment needs within the Palomar Community College District. Surveys were mailed to a stratified random sample of 600 North San Diego County employers, requesting respondents to provide information on type and size of business, to rank the occupational programs offered by Palomar according to employment needs, to recommend new programs to be considered in the next 5 years, and to project the number of employees that would be needed in those fields. Study findings, based on responses from 256 (43%) of the employers, included the following: (1) of the responding companies, 16% were classified as construction/apprenticeship, 16% as manufacturing, 14% as hospitality and recreation, 11% as transportation, 10% as business and clerical, and 10% as public services; (2) 68.8% of the respondents represented small businesses, 21.5% medium-sized businesses, and 9.8% large firms; and (3) the programs rated as most important to the employers' needs were accounting, word processing, computer science, office management/clerical, mechanic/general, telecommunications, bookkeeping, banking and finance, escrow, nursing, quality assurance, nurse assistant, machine tool operator, and restaurant manager. The study report includes findings presented by vocational area, additional information from various sources regarding population and employment projections for the San Diego area, a list of responding employers, the goals of the state's 5-year plan for vocational education, and the survey instrument. (HB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED258633

AN EMPLOYER NEEDS ASSESSMENT

FOR VOCATIONAL EDUCATION

PALOMAR COMMUNITY COLLEGE DISTRICT

Under the Direction of
Dr. Ed J. Muraski
Dean of Vocational Education

Project Coordinator
Cherie Barker
Director, Gender Equity/
Student Accountability Model

May 1984

JC 850 346

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

E. Muraski

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☑ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

ACKNOWLEDGMENTS

The success of this project would not have been possible without the efforts of several Palomar employees. Words cannot adequately express appreciation for the many hours of hard work above and beyond the call of duty by those who participated. Among those who deserve thanks are: Bill Dedic, Staff Assistant, Vocational Education; Shirley Meyer, Gender Equity Program Assistant; Pat Riley, Student Help; Pacia Ryneal-Kitching, Student Help; the Vocational Education Directors and the Instructional Deans.

This project would not have been possible without the express approval of Theodore Kilman, Ph.D., Assistant Superintendent and Omar H. Scheidt, Ed.D., District Superintendent and President.

This acknowledgment would not be complete without a special note of thanks to the employers in the Palomar Community College District who took the time to reply to the questionnaire. A listing of these employers can be found in Appendix A.

The Data Processing Department at Palomar College provided the figures and graphs.

ABSTRACT

The planning process for education and vocational education specifically involves the gathering of data for analysis in formulating programs to meet upcoming needs. Palomar Community College has not had a vocational needs assessment in several years. In order to undertake a comprehensive plan for education in the college and the county, the first step mandates a current assessment of the employment needs in the community.

Although the State provides state-wide needs data and the California Occupational Information System (C.O.I.S.) does give us projected needs data, the data is a minimum of eighteen (18) months old by the time it reaches the college. With the census data projecting a 75% growth in population for North County in the next twenty years, Palomar Community College Office of Vocational Education felt additional data was necessary for planning.

With experience in educational planning and the implementation of an employer needs assessment in other colleges, the Dean of Vocational Education organized the Vocational Education staff to complete this task. The employer needs assessment was completed in the following manner: the employment population of North County was identified; employment development data was used to stratify the sample. The survey forms were sent to a stratified random sampling of 600 employers in the North San Diego County area which, after a follow-up effort, obtained a forty-three percent (43%) return. This percentage of return is considered significant

and a high percentage return for a survey of this nature.

Based on the information obtained we were able to isolate the occupations most needed in the employment community of Palomar Community College District. In general, the following occupations were listed in the top quartile as having the highest need:

Accounting	Emergency Medical Technician
Word Processing	Dietetic Assistant
Computer Science	Engine Tune-Up Analysis
Office Management/Clerical	Diesel Mechanic/Auto
Mechanic/General	Technical Photography
Telecommunications	Interior Design
Bookkeeping	Surveying
Banking & Finance	Chef
Escrow	Cook
Nursing	Apprenticeship Carpentry
Quality Assurance	Apprenticeship Plumbing
Nurse Assistant	Plumbing & Pipefitting
Machine Tool Operator	Carpentry
Restaurant Manager	Construction Technology
LVN to RN	Child Development
Television Broadcast Electronics	Fire Science
Drafting/Technical	Geronotology
Electronics	Criminal Justice
Computer Assisted Manufacturing	

Although other significant needs have been identified, the occupations which appear in the top quartile need to be prioritized by the educational agencies in the county. The findings in this survey need to be studied and combined with other data regarding other delivery systems in the area of financial constraints, etc., before action can be taken.

TABLE OF CONTENTS

INTRODUCTION 1

PROCEDURES 3

Limitations 5

FINDINGS 9

FINDINGS BY VOCATIONAL AREA 10

CONSTRUCTION/APPRENTICESHIP 12

BUSINESS & CLERICAL 14

ENVIRONMENT 16

COMMUNICATION & MEDIA 19

HEALTH SERVICES 21

MANUFACTURING 23

CONSUMER & HOMEMAKING 26

HOSPITALITY & RECREATION 27

TRANSPORTATION 30

PUBLIC SERVICES 32

OVERALL 34

ADDITIONAL INFORMATION 35

Small Businesses Provide First Jobs 36

NEED FOR FURTHER STUDY 37

APPENDICES 38

TABLES AND FIGURES

TABLE NO.	TITLE	PAGE
1	EMPLOYMENT IN NORTH SAN DIEGO COUNTY	3
2	OCCUPATIONAL CLASSIFICATIONS	4
3	LIST OF OCCUPATIONS IN ORDER OF PREFERENCE	6
4	PERCENT OF RETURN BY VOCATIONAL AREA	9
	LIST OF OCCUPATIONS IN ORDER OF PREFERENCE:	
5	CONSTRUCTION & APPRENTICESHIP	12
6	BUSINESS & CLERICAL	15
7	ENVIRONMENT	17
8	COMMUNICATION & MEDIA	19
9	HEALTH SERVICES	22
10	MANUFACTURING	24
11	CONSUMER & HOMEMAKING	27
12	HOSPITALITY & RECREATION	28
13	TRANSPORTATION	30
14	PUBLIC SERVICES	32
15	PROJECTED GROWTH - PALOMAR COMMUNITY COLLEGE DISTRICT	35

FIGURE NO.	TITLE	PAGE
	SIZE OF BUSINESS:	
1	OVERALL	10
2	CONSTRUCTION/APPRENTICESHIP	12
3	BUSINESS & CLERICAL	14
4	ENVIRONMENT	17
5	COMMUNICATION & MEDIA	19
6	HEALTH SERVICES	21
7	MANUFACTURING	24
8	CONSUMER & HOMEMAKING	26
9	HOSPITALITY & RECREATION	28
10	TRANSPORTATION	30
11	PUBLIC SERVICES	32
12	PROJECTED EMPLOYMENT IN SAN DIEGO'S HIGH TECH INDUST.	36

INTRODUCTION

The California Community Colleges Board of Governors recognizes that within existing law, decision making for individual community colleges is a responsibility of local districts. The role of the Board of Governors in adopting vocational education policies is to set the direction for the comprehensive delivery of vocational education and to assist local community colleges in meeting the diverse and unique needs of their communities. Both the Board of Governors' Five Year Plan and the California Five Year Plan for Vocational Education recognize the potential benefits of needs assessments and encourage districts to utilize them in planning (Appendix B).

In the 1977-82 Five Year Plan for the California Community Colleges, the Board of Governors suggested the following criteria for program planning and development:

"Plans for program development should be oriented more to the future and based upon at least three criteria: (a) expected community interest and student demand, (b) employment opportunities and (c) other organizations and districts providing similar programs."

The Plan went on to caution districts not to rely too heavily on any one of these criteria, but rather to temper any dicisions with considerations of the needs of society. In this regard, the Plan concluded, districts should assess the educational needs of the community, "...in order to ensure properly balanced program development."

Therefore, the Vocational Education Division undertook a needs assessment to determine potential employment needs in our community. The section entitled "Additional Information" addresses the other program planning criteria as suggested by the Board of Governors.

The term "needs assessment" is very familiar to most educators, yet may not be clearly understood. Consequently, a definition may be in order. According to Webster, "need" is "...something useful, required or desired that is lacking"; "assessment," (again per Webster) is "a way...of setting an amount on (something)." As Vocational Education is closely linked to job market demands, this needs assessment specifically addressed employers' PERCEIVED employment needs. The data obtained from the needs assessment should be one of the tools utilized in systematic planning of vocational programs.

As a word of caution, assessments are frequently interpreted as objectively determining needs. This interpretation can lead to some conspicuous errors in policy development and program planning. In fact, almost universally, needs assessments reflect perceived needs and wants and this should be kept in mind to avoid misinterpretation of the data. Inasmuch as perceived needs may not only be quite different from "real" or "objective" needs, but also quite differently pursued, this definition is critical in analyzing and utilizing the results.

PROCEDURES

The purpose of this study is to determine the employment needs of employers in the Palomar Community College District. In order to achieve this purpose, a survey of the employment community was undertaken.

The survey instrument developed and utilized for the assessment is found in Appendix C. The first page of the instrument identifies the respondent, verifies purpose of the business and determines company size.

The second and third pages of the instrument list programs and/or occupational areas for which Palomar offers training or which are defined as occupational. Respondents were asked to rank employment needs by: 1 = low; 2 = medium; 3 = high, being reminded to indicate only those areas that applied to their own business.

Page three of the instrument provided space for respondents to indicate new programs that should be considered in the next five years with the same 1 - 3 ranking and also projected number of employees in that field.

A cover letter addressed to the employers surveyed, as well as a stamped addressed envelope was included with the instrument (Appendix D).

Based on information provided by the Oceanside and Escondido Employment Development Department (Images, 1983) it was determined that North San Diego County has the following employment breakdown:

Table 1
Employment in North San Diego County

Broad Occupational Classification	% Of Employment
Agriculture/Construction	15
Finance	10
Manufacturing	38
Service	37

As these classifications did not align with occupational education classifications the classifications were recategorized into vocational areas as indicated in Table 2, with vocational programs/occupational areas clustered under each of these major areas (Appendix C [Survey]).

It was determined that a sufficient sample size for the District service area population would be six hundred (600). The stratified sample percentages are also indicated in Table 2.

Table 2
Occupational Classification

Vocational Area	% of Survey	Ramdom No. Surveyed
Construction/Apprenticeship	16	95
Business & Clerical	10	58
Environment	5	32
Communication & Media	6	37
Health Services	7	42
Manufacturing	16	97
Consumer and Homemaking	5	31
Hospitality & Recreation	14	82
Transportation	11	66
Public Services	10	60
Totals	100	600

The 1984 North San Diego County Pacific Bell Yellow Pages was utilized to identify employers. The yellow page index, which is cross-referenced, was used to determine employers within program areas. In order to start the random selection, the numbers one through five (1-5) were placed on individual sheets of paper and put in a dish with the number three (3) being drawn. The numbers six through ten (6-10) were also placed in a dish with the number seven (7) being selected. The procedure identified the starting numbers for random sample.

When a vocational area had limited employers within the Palomar Community College District employers outside the District were included. When there were sufficient employers within the District, and the random number fell on an out-of-District employer, that employer was not included, with the random selection continuing as if the employer had been included.

This process was continued until the actual number quota was reached.

A listing of employers was made by vocational area. In addition, an alphabetical listing of employers was developed. Duplications were eliminated thereby assuring that an employer was only listed in one (1) vocational area. No single program or occupational title was listed with less than five (5) related employers in an attempt to assure an adequate response return.

Limitations. During the course of the project, as limitations were discovered, attempts were made to investigate the exceptions and control these factors in data analysis as follows:

1. Some employers completed only the first page of the survey, although they are listed as a return, no data will be reflected;

2. Although the employers were asked to only rank programs/occupational titles that applied to their own business, some block marked every area. In these instances data is only reflected in the vocational area appropriate to that business;

3. Efforts were made to obtain two (2) employer responses for each program/occupational title. However, a few titles only received one (1) response. That response is reflected in the "List of Occupations in Order of Preference," Table 3, but is not included in the "List of Occupational Preference by Vocational Area," Table 4;

4. This survey represents a sample of employers. The priorities listed can be of some meaning for planning purposes. In order to use the raw score, all employers must be sampled.

Table 3
LIST OF OCCUPATIONS IN ORDER OF PREFERENCE

OCCUPATIONAL AREA	TOTAL % OF ALL RESPONSES	TOTAL NUMBER OF RESPONSES	% OF EMPLOYMENT NEED		
			LOW	MEDIUM	HIGH
Accounting	51	130	11	42	47
Clerical	44	113	10	36	54
Bookkeeping	36	91	9	40	51
Supervision	36	94	11	46	43
Business Administration	34	88	11	47	42
Business/General	33	84	6	52	42
Public Relations	33	84	11	43	46
Word Processing	31	79	11	43	46
Computer Science	30	77	14	42	44
Office Education	30	77	14	38	48
Marketing & Merchandising	28	71	16	35	49
Advertising	27	68	25	43	32
Small Business	26	67	20	37	43
Computer Software	26	66	18	43	39
Computer Programming	25	64	16	39	45
Mid-Management	23	60	16	52	32
Ship/Rec Clerk Warehousemar	22	58	40	31	29
Computer Systems Analysis	20	51	29	43	28
Retail Sales	18	47	34	19	47
Banking & Finance	16	40	25	35	40
Drafting/Mechanical	14	36	8	50	42
Drafting	14	35	6	28	66
Medical Secretary	14	35	46	23	31
Credit & Lending	13	34	29	27	44
Carpentry	13	34	18	47	35
Building Maintenance	13	33	15	60	25
Electrician	13	33	27	61	12
Welding	13	33	15	52	33
Customer Service	13	33	2	49	49
Quality Assur. Technology	13	33	21	37	42
Legal Secretary	12	31	42	39	19
Plumbing & Pipefitting	12	30	20	53	27
Real Estate	11	29	41	24	35
Electronics	11	28	11	32	57
Mechanic/General	11	28	4	46	50
Drafting/Technical	11	27	11	41	48
Apprenticeship Automotive	11	27	37	26	37
Bank Management	10	26	50	8	42
Bank Teller	10	26	50	11	39
Electronics/Digital	10	26	19	23	58
Computer Assisted Drafting	10	25	20	32	48
Computer Assisted Manuf	10	25	28	20	52

Table 3 (Continued)
LIST OF OCCUPATIONS IN ORDER OF PREFERENCE

OCCUPATIONAL AREA	TOTAL % OF ALL RESPONSES	TOTAL NUMBER OF RESPONSES	% OF EMPLOYMENT NEED LOW	MEDIUM	HIGH
General Electronics Tech	10	25	24	24	52
Elect Field Service Tech	9	24	29	21	50
Construction/Technical	9	24	26	37	37
Escrow	9	24	46	20	48
Apprenticeship Carpentry	9	23	26	43	31
Apprenticeship Plumbing	9	23	17	43	40
Drafting/Architectural	9	23	17	31	52
Telecommunications	8	22	4	32	64
Construction Inspection	8	22	41	23	36
Sheetmetal	8	22	27	50	23
Microprocessor Technician	8	22	23	32	45
Machine Tool	8	22	14	18	68
Cabinetmaking & Millwork	8	21	29	38	33
Auto Proc Ctrl M/R Tech	8	21	38	48	14
Consumer Electronics Equip Repair Technician	8	21	38	29	33
Air Conditioning and Refrigeration	8	20	30	30	40
Commercial Art	8	20	20	40	40
Journalism	7	19	16	42	42
Numerical Control Operator	7	18	28	22	50
Apprenticeship Auto Body	7	17	41	24	35
Roofing	7	17	35	47	18
Janitorial	7	17	6	65	29
Emergency Medical Technician	7	17	6	24	70
Nursing	7	17	17	17	66
Cook	7	17	7	35	58
Plastics Fabrication	7	17	47	24	29
Robotics Maint/Rep Tech	7	17	30	35	35
Nurse Assistant	6	16	25	25	50
Technical Photography	6	16	31	44	25
LVN to RN	6	16	12	25	63
Business Machine Repair	6	16	56	31	13
Tune-Up & Engine Analysis	6	15	13	13	74
Apprenticeship Millwright	6	15	40	20	40
Chef	6	15	7	33	60
Recreation Leader	6	15	27	33	40
Child Development	6	15	27	20	53
Surveying	6	15	13	60	27
Apprenticeship Pipefitting	5	14	43	29	28
Apprenticeship Roofing	5	14	50	29	21
Diesel Mechanic/Heavy Duty	6	14	29	29	42
Restaurant Management	5	14	14	22	64
Illustration	5	13	8	39	53
Diesel Mechanic/Auto	5	13	23	15	62
Operating Engineer	5	13	46	46	8
Dietetic Assistant	5	13	22	39	39
Geronotology/Geriatrics	5	13	15	23	62
Food/Beverage Management	5	13	0	54	46
TV Broadcast Electronics	5	12	0	42	58
Security Guard	5	12	33	33	33
Water Treatment	5	12	8	50	42

Table 3 (Continued)
LIST OF OCCUPATIONS IN ORDER OF PREFERENCE

OCCUPATIONAL AREA	TOTAL % OF ALL RESPONSES	TOTAL NUMBER OF RESPONSES	% OF EMPLOYMENT NEED		
			LOW	MEDIUM	HIGH
Medical Ins Specialist	5	12	8	42	50
Medical Record Technologist	5	12	25	33	42
Executive Housekeeping	5	12	16	42	42
Fire Science	5	12	33	33	33
Travel Service	5	12	33	25	42
Biomedical Instrumentation	5	12	83	0	17
Graphic Communications Tech	5	12	17	17	66
Institutional Food Serv Mgt	5	12	17	25	58
Prep Cook	4	11	9	64	27
Home Health Aide	4	11	27	46	27
Homemaker for Frail Elderly	4	11	36	36	28
Safety & Security Mgmt	4	11	28	36	36
Automotive Body Work	4	11	27	18	55
Chassis & Drive Lines	4	11	9	36	55
Motorcycle & Small Eng Rep	4	10	40	20	40
Recreation Agency Leader	4	10	40	20	40
Law Enforcement	4	10	50	30	20
Lasar Disc Technology	4	10	60	20	20
Graphic Communication/ Production	4	10	10	30	60
Graphic Communication/ Printer	4	10	10	50	50
Solar Energy Technician	4	10	0	50	50
Dental Assistant	4	10	40	20	40
Sports Medicine	4	10	40	30	30
Industrial Security	4	10	20	40	40
Investigative Security	4	10	20	40	40
Instructional Aide/Bilngl	4	9	33	45	22
Criminal Justice	4	9	22	22	56
Entrepeneurship	4	9	11	56	33
Parks & Recreation Mgmt	4	9	33	22	45
Air Craft Commercial Pilot	4	9	33	11	56
Demonstrators	3	8	12	63	25
Interior Design	3	8	0	37	63
Wastewater Treatment	3	8	12	25	63
Dental Recep/Off Manager	3	8	50	0	50
Medical Assisting	3	8	13	37	50
Rehabilitative Recreation Leader	3	8	37	13	50
Physical Therapy Assistant	3	8	25	50	25
Public Administration	3	8	0	63	37
Auto Upholstery	3	7	28	28	43
Respiratory Therapy Asst	3	7	57	14	29
Retail Security	3	7	29	29	42
Library Technician	3	7	29	42	29
Recording Studio Technician	3	7	29	42	29
Airport Management Assistant	3	7	43	0	57
Animation	3	7	43	43	14
Biomedical Technician	2	6	50	0	50
Dental Technician	2	6	50	0	50
Hotel Desk Clerk	2	6	33	17	50

Table 3 (Continued)
LIST OF OCCUPATIONS IN ORDER OF PREFERENCE

OCCUPATIONAL AREA	TOTAL % OF ALL RESPONSES	TOTAL NUMBER OF RESPONSES	% OF EMPLOYMENT NEED LOW	MEDIUM	HIGH
Aeronautical Operations	2	6	33	17	50
Hotel/Motel Management	2	6	33	17	50
Instructional Aide/ Elementary	2	6	67	33	0
Nuclear Security	2	6	66	17	17
Production Sewing	2	5	20	20	60
Aeronautical	2	5	0	40	60
Optical Technician	2	5	60	0	40
Air Traffic Control Specialist	2	5	40	0	60
Fashion Merchandising	2	4	0	0	100
Upholstery	1	3	0	0	100
Instructional Aide/ Special Ed	1	3	67	33	0
Fashion Design	1	2	0	0	100
Fashion Manufacturing	1	1	0	0	100
Bank Operations	0	0	0	0	0

FINDINGS

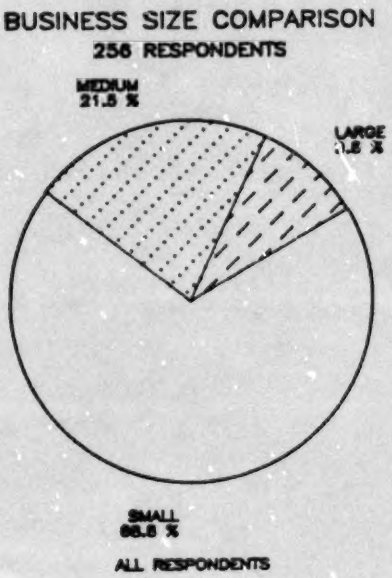
Of the six hundred (600) employers surveyed, a total of two hundred fifty-six (256) returned the survey in time to be included in the data analysis. This response was achieved by two (2) mailings and represents an overall rate of return of forty-three percent (43%). Table 4 indicates the percentage of return within each vocational area.

Table 4
PERCENTAGE OF RETURN BY VOCATIONAL AREA

Vocational Area	% of Return
Construction/Apprenticeship	32
Business & Clerical	50
Environment	63
Communication & Media	57
Health Services	55
Manufacturing	38
Consumer & Homemaking	26
Hospitality & Recreation	26
Transportation	39
Public Services	67

Figure 1 represents the percent of overall response as correlated with the size of the business. Small Business was defined as up to twenty (20) employees; medium business, twenty-one (21) through one hundred (100) employees and large business one hundred one or more (101+) employees.

Figure 1



FINDINGS BY VOCATIONAL AREA

The data collected was analyzed for each Vocational Area and is presented in Tables 5 through 14. Employer responses to employment needs in areas outside of the specific purpose of the business are also indicated as "Auxiliary" needs. The percent of responses within each Vocational Area as correlated with the size of the business are represented in Figures 2 through 11.

The Table for each Vocational Area provides an ordinal ranking by program/occupational title of all responses within that vocational area. The data to the right of each title indicates the following:

Column 1 Of all responses within the vocational area total percent of employers indicating a need;

Column 2 The actual raw number of all employers indicating that title within the Vocational Area;

Column 3-5 Of the employers with the Vocational Area who marked the title the percent of employment need ranked by 1 - low, 2 - medium, 3 - high.

For example: On Table 5, thirty-three percent (33%) of the employers within the Vocational Area indicated a need for apprentice carpenters. This percent represents a raw number of ten (10). Of the ten (10) employers who indicated a need for Apprenticeship Carpentry, twenty percent (20%) indicated a low need; twenty percent (20%) indicated a medium need and sixty percent (60%) indicated a high need.

In utilizing the Cluster data for program planning it should be kept in mind that by clustering businesses by vocational training area titles, in some cases very diverse company purposes may be included under the same major area. For example: Public Services includes Criminal Justice, Fire Science and Gerontology.

In analyzing the responses indicated as "Auxiliary" needs, caution is recommended. Based on evaluation of responses the following may be concluded: although employers were asked to rank employment needs many employers indicated what may be considered service needs, i.e., on Table 5, Auxiliary need of Bank Management for the Construction/Apprenticeship Cluster.

The figure for each Vocational Area represents the percent of all returns within that area as correlated with the size of the business. Small business was defined as up to twenty (20) employees; medium business twenty-one (21) through one hundred (100) employees and large business one hundred one or more (101+) employees.

CONSTRUCTION/APPRENTICESHIP

A total of ninety-five (95) employers were surveyed in this Cluster Area. Thirty (30) employers returned the survey for a thirty-two percent (32%) rate of return. As displaced in Figure 2, a high percentage of responses in this Vocational Cluster was received from small business.

Figure 2

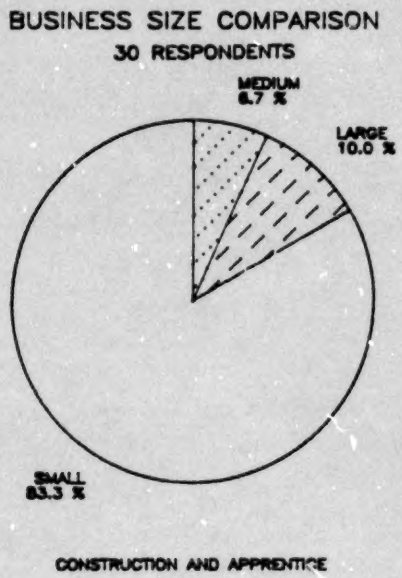


Table 5 provides an ordinal ranking of the Cluster Occupational Areas with Carpentry and Plumbing trades, both apprentice and non-apprentice, appearing in the top four (4) ranked positions.

Table 5
LIST OF OCCUPATIONS IN ORDER OF PREFERENCE
CONSTRUCTION/APPRENTICESHIP

OCCUPATIONAL AREA	TOTAL % OF CLUSTER RESPONSES	TOTAL # OF CLUSTER RESPONSES	% OF EMPLOYMENT NEED		
			LOW	MEDIUM	HIGH
Apprenticeship Carpentry	33	10	20	20	60
Apprenticeship Plumbing	33	10	10	30	60
Plumbing & Pipefitting	33	10	20	20	60
Carpentry	30	9	0	11	89
Construction Technology	30	9	11	11	78
Sheetmetal	27	8	12	63	25
Welding	23	7	14	43	43

Table 5 (Continued)
CONSTRUCTION/APPRENTICESHIP

OCCUPATIONAL AREA	TOTAL % OF CLUSTER RESPONSES	TOTAL # OF CLUSTER RESPONSES	% OF EMPLOYMENT NEED LOW	MEDIUM	HIGH
Construction Inspection	23	7	29	14	57
Apprenticeship Millwright	23	7	29	14	57
Apprenticeship Automotive	20	6	33	17	50
Apprenticeship Pipefitting	20	6	16	17	67
Cabinetmaking & Millwork	20	6	0	17	83
Electrician	20	6	0	67	33
Apprenticeship Auto Body	17	5	40	20	40
Air Conditioning & Refrigeration	17	5	40	20	40
Roofing	17	5	20	40	40
Apprenticeship Roofing	13	4	50	0	50
Building Maintenance	13	4	25	50	25
Operating Engineer	10	3	67	33	0
Auxiliary					
Accounting	33	10	20	10	70
Drafting/Mechanical	30	9	0	67	33
Bookkeeping	27	8	12	25	63
Business Administration	27	8	0	63	37
Clerical	23	7	0	43	57
Ship/Rec Clerk Warehouseman	23	7	28	43	29
Machine Tool Operator	23	7	28	29	43
Drafting	20	6	17	33	50
Business/General	20	6	17	33	50
Small Business	20	6	16	17	67
Solar Energy Technician	17	5	0	40	60
Office Education	17	5	0	40	60
Public Relations	17	5	0	60	40
Supervision	17	5	0	20	80
Drafting/Architectural	13	4	0	50	50
Diesel Mechanic/Heavy Duty	13	4	0	25	75
Credit & Lending	10	3	33	0	67
Commercial Art	10	3	67	33	0
Customer Service	10	3	0	67	33
Interior Design	10	3	0	67	33
Marketing & Merchandising	10	3	0	33	67
Computer Assisted Drafting	10	3	0	33	67
Computer Assisted Manuf	10	3	0	33	67
Plastics Fabrication	10	3	0	0	100
Quality Assurance Technology	10	3	33	0	67
Banking & Finance	10	3	33	0	67
Computer Science	10	3	0	33	67
Janitorial	7	2	0	50	50
Surveying	7	2	0	100	0
Water Treatment	7	2	0	100	0
Automated Process Control/ Maint. & Repair	7	2	50	50	0
Computer System Analysis	7	2	0	0	100
Technical Photography	7	2	100	0	0

Table 5 (Continued)
CONSTRUCTION/APPRENTICESHIP

OCCUPATIONAL AREA	TOTAL % OF CLUSTER RESPONSES	TOTAL # OF CLUSTER RESPONSES	% OF EMPLOYMENT NEED LOW	MEDIUM	HIGH
Automotive/Chassis & Drive Lines	7	2	0	50	50
Diesel Mechanic/Auto	7	2	0	50	50
Mechanic/General	7	2	0	0	100
Tune-up & Engine Analysis	7	2	0	0	100
Advertising	7	2	50	50	0
Bank Management	7	2	50	0	50
Computer Programming	7	2	0	0	100
Retail Sales	7	2	50	50	0

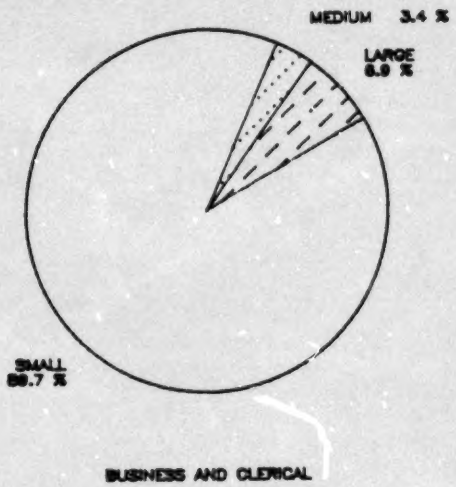
BUSINESS & CLERICAL

Fifty-eight (58) employers were surveyed in this Cluster Area. Fifty percent (50%) returned surveys (N=29).

As indicated in Figure 3, a large portion of the responses in the Business and Clerical Cluster were from small business.

Figure 3

BUSINESS SIZE COMPARISON
29 RESPONDENTS



An ordinal ranking of occupational titles indicated by employers in the Business and Clerical Cluster is presented in Table 6. It should be noted that Accounting, Word Processing, Bookkeeping, Office Education and Computer Science are in the top quartile of this table as well as Table 3 which indicates the ordinal ranking of all occupations.

Table 6

LIST OF OCCUPATIONS IN ORDER OF PREFERENCE

BUSINESS & CLERICAL

OCCUPATIONAL AREA	TOTAL % OF CLUSTER RESPONSES	TOTAL # OF CLUSTER RESPONSES	% OF EMPLOYMENT NEED LOW	MEDIUM	HIGH
Accounting	83	24	5	50	46
Word Processing	72	21	5	38	57
Computer Science	69	20	15	50	35
Office Management/Clerical	66	19	10	16	74
Bookkeeping	62	18	11	22	67
Banking & Finance	62	18	16	28	56
Escrow	62	18	16	28	56
Bank Teller	59	17	29	12	59
Business/General	59	17	12	29	59
Computer Software	59	17	29	42	29
Office Education	59	17	18	23	59
Real Estate	59	17	24	24	52
Mid-Management	55	16	19	56	25
Bank Operations	55	16	31	13	56
Business Administration	55	16	25	31	44
Computer Programming	55	16	12	50	38
Marketing & Merchandising	52	15	27	40	33
Public Relations	52	15	13	33	54
Computer System Analysis	52	15	33	67	0
Supervision	52	15	33	40	27
Advertising	48	14	43	36	21
Bank Management	48	14	36	0	64
Credit & Lending	48	14	14	22	64
Legal Secretary	45	13	38	31	31
Ship/Rec Clerk Warehouseman	41	12	58	8	34
Small Business	41	12	50	33	17
Medical Secretary	41	12	67	16	17
Retail Sales	41	12	58	34	8
Auxiliary					
Customer Service	24	7	0	71	29
Demonstrators	17	5	0	80	20
Graphic Communications	14	4	0	25	75
Janitorial	14	4	0	75	25
Electronics	14	4	0	50	50
Digital & Computer Electronic Technician	14	4	25	25	50
Quality Assurance	14	4	25	25	50
Machine Tool Operator	10	3	33	33	33
Apprenticeship Roofing	10	3	0	67	33
Graphic Communications Printer	10	3	0	67	33
Telecommunications	10	3	0	100	0

Table 6 (Continued)
BUSINESS & CLERICAL

OCCUPATIONAL AREA	TOTAL % OF CLUSTER RESPONSES	TOTAL # OF CLUSTER RESPONSES	% OF EMPLOYMENT NEED LOW	MEDIUM	HIGH
Entrepreneurship	10	3	0	100	0
Production Sewing	10	3	33	33	33
Drafting/Mechanical	10	3	33	33	33
Consumer Electrical Equipment Repair	10	3	0	67	33
Robotics Maint/Rep Tech	10	3	0	67	33
Illustration	7	2	0	0	100
Journalism	7	2	0	50	50
Building Maintenance	7	2	0	50	50
Carpentry	7	2	0	50	50
Electrician	7	2	0	100	0
Sheetmetal	7	2	0	100	0
Welding	7	2	0	100	0
Fashion Merchandising	7	2	0	0	100
Dental Assisting	7	2	50	0	50
Dental Recep/Off Manager	7	2	50	0	50
Dental Technician	7	2	0	0	100
Dietetic Assistant	7	2	0	0	100
Medical Ins Specialist	7	2	0	50	50
Medical Record Technologist	7	2	0	50	50
Institutional Food Services Management	7	2	0	0	100
Drafting	7	2	50	0	50
Drafting/Architectural	7	2	50	0	50
Drafting/Technical	7	2	50	50	0
Electronics Field Service Technician	7	2	50	0	50
Electronics/General Tech.	7	2	0	50	50
Microprocessor Technician	7	2	0	50	50
Plastics Fabrication	7	2	100	0	0

ENVIRONMENT

A total of thirty-two (32) employers were surveyed in this Cluster Area. Twenty (20) employers returned surveys for a sixty-three percent (63%) response rate.

As indicated in Figure 4, there were no large businesses who responsed. However, there was a significant number of medium size businesses responding.

Figure 4

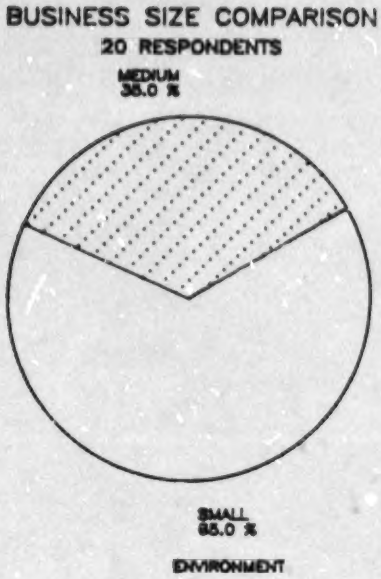


Table 7 presents an ordinal ranking of occupations as indicated by the employers. Although Solar Energy Technician received a low percent of return the high need should be noted. The Auxiliary need of Drafting should be considered as it appears several times by specific need.

Table 7

LIST OF OCCUPATIONS IN ORDER OF PREFERENCE
ENVIRONMENT

OCCUPATIONAL AREA	TOTAL % OF CLUSTER RESPONSES	TOTAL # OF CLUSTER RESPONSES	% OF EMPLOYMENT NEED		
			LOW	MEDIUM	HIGH
Surveying	35	7	0	43	57
Water Treatment	35	7	0	29	71
Wastewater Treatment	30	6	16	17	67
Solar Energy Technician	10	2	0	0	100
Auxiliary					
Accounting	50	10	10	40	50
Clerical	50	10	10	60	30
Word Processing	45	9	22	45	33
Business/General	40	8	0	50	50
Supervision	40	8	25	25	50
Bookkeeping	35	7	28	29	43
Drafting	35	7	0	14	86
Small Business Manager	35	7	43	14	43
Computer-Aided Drafting	30	6	16	17	67
Drafting/Architectural	30	6	0	17	83
Computer Software	30	6	17	33	50

Table 7

LIST OF OCCUPATIONS IN ORDER OF PREFERENCE

ENVIRONMENT

OCCUPATIONAL AREA	TOTAL % OF CLUSTER RESPONSES	TOTAL # OF CLUSTER RESPONSES	% OF EMPLOYMENT NEED		
			LOW	MEDIUM	HIGH
Business Administration	30	6	17	33	50
Mid-Management	30	6	33	33	33
Construction Inspection	30	6	50	0	50
Drafting/Technical	25	5	0	40	60
Apprenticeship Auto	25	5	60	40	0
Apprenticeship Pipefitting	25	5	60	40	0
Computer Science	25	5	20	40	40
Office Education	25	5	20	40	40
Legal Secretary	25	5	60	40	0
Public Relations	25	5	40	40	20
Real Estate	25	5	60	40	0
Plumbing & Pipefitting	25	5	20	60	20
Advertising	25	5	60	40	0
Welding	25	5	20	60	20
Electrician	25	5	60	40	0
Computer Programming	25	5	20	20	60
Machine Tool Operator	20	4	0	75	25
Janitorial	20	4	0	75	25
Roofing	20	4	50	50	0
Medical Secretary	20	4	100	0	0
Retail Sales	20	4	75	0	25
Ship/Rec Clerk Warehouseman	20	4	75	0	25
Banking & Finance	20	4	75	25	0
Bank Management	20	4	100	0	0
Bank Operations	20	4	100	0	0
Bank Teller	20	4	100	0	0
Computer Systems Analysis	20	4	50	25	25
Credit & Lending	20	4	100	0	0
Escrow	20	4	100	0	0
Marketing & Merchandising	20	4	75	0	25
Customer Service	15	3	0	33	67
Automated Process Control	15	3	67	0	33
Computer-Assisted Manufacturing	15	3	67	0	33
Drafting/Mechanical	15	3	33	0	67
Apprenticeship Auto Body	15	3	67	33	0
Apprenticeship Carpentry	15	3	33	33	33
Apprenticeship Plumbing	15	3	33	33	33
Apprenticeship Roofing	15	3	67	33	0
Operating Engineer	15	3	67	33	0
Carpentry	15	3	33	33	33
Mechanic/General	10	2	0	50	50
Plastics Fabrication	10	2	50	0	50
Quality Assurance	10	2	50	50	0
Biomedical Instru Tech	10	2	100	0	0
Business Machine Repair	10	2	50	50	0
Sheet Metal	10	2	50	50	0
Apprenticeship Millwright	10	2	100	0	0
Air Conditioning & Refrigeration	10	2	50	50	0
Building Maintenance	10	2	100	0	0
Cabinetmaking & Millwork	10	2	100	0	0
Construction Technology	10	2	50	0	50

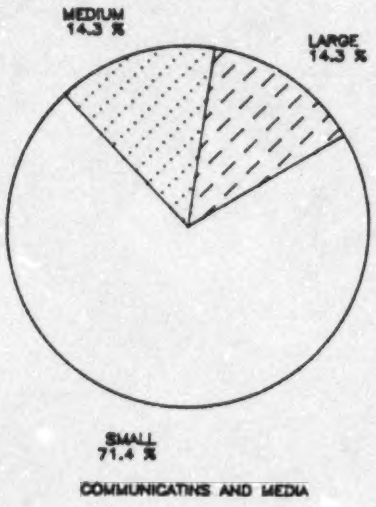
COMMUNICATION & MEDIA

Thirty-seven (37) employers were mailed surveys in this Occupational Area with a response rate of fifty-seven percent (57%). The raw number of returns was twenty-one (21).

Although the largest percent of return came from small business, medium and large business each represent a fourteen percent (14%) return as indicated in Figure 5.

Figure 5

BUSINESS SIZE COMPARISON
21 RESPONDENTS



COMMUNICATINS AND MEDIA

Table 8 provides an ordinal ranking of occupations within this Cluster Area. Both Commerical Art and Graphic Communications had specialized occupations listed for employer choice. The Graphic Communication specialities all indicated a high need (100%).

Table 8

LIST OF OCCUPATIONS IN ORDER OF PREFERENCE
COMMUNICATION & MEDIA

OCCUPATIONAL AREA	TOTAL % OF CLUSTER RESPONSES	TOTAL # OF CLUSTER RESPONSES	% OF EMPLOYMENT NEED LOW	MEDIUM	HIGH
Telecommunications	62	13	8	15	77
Television Broadcast Electronics	48	10	0	40	60
Technical Photography	38	8	12	38	50
Commercial Art	33	7	0	29	71

Table 8 (Continued)

COMMUNICATION & MEDIA

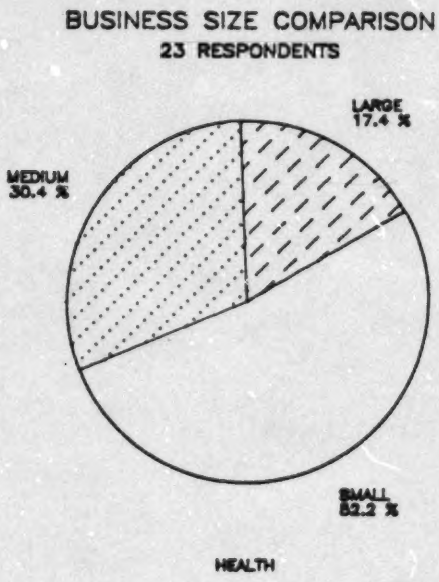
OCCUPATIONAL AREA	TOTAL % OF CLUSTER RESPONSES	TOTAL # OF CLUSTER RESPONSES	% OF EMPLOYMENT NEED LOW	MEDIUM	HIGH
Journalism	33	7	14	43	43
Illustration	24	5	0	20	80
Graphic Communications	24	5	0	0	100
Graphic Communications Production	24	5	0	0	100
Recording Studio Technician	24	5	20	60	20
Graphic Communications Printer	19	4	0	0	100
Animation	19	4	25	50	25
Auxillary					
Accounting	52	11	0	64	36
Bookkeeping	48	10	0	80	20
Advertising	48	10	10	40	50
Public Relations	48	10	0	60	40
Business Administration	43	9	11	67	22
Clerical	43	9	22	33	45
Word Processing	43	9	11	67	22
Retail Sales	43	9	0	33	67
Supervision	43	9	0	78	22
Business/General	38	8	0	50	50
Marketing & Merchandising	38	8	0	25	75
Small Business	38	8	12	50	38
Customer Service	33	7	0	43	57
Mid-Management	33	7	14	72	14
Computer Science	29	6	33	50	17
Ship/Rec Clerk Warehouseman	29	6	67	16	17
Electronics Field Service Technician	29	6	16	17	67
Computer Software	24	5	20	60	20
Computer Programming	24	5	20	40	40
Office Education	19	4	50	25	25
Drafting	19	4	0	25	75
Electronics	19	4	25	50	25
Electronic Equipment Repair	19	4	25	50	25
Digital & Computer Electronic Technician	19	4	0	50	50
General Electronics Technician	19	4	25	50	25
Banking & Finance	14	3	33	33	33
Systems Analysis	14	3	67	0	33
Credit Lending	14	3	33	33	33
Construction Technology	14	3	33	67	0
Electrician	14	3	33	33	33
Drafting/Mechanical	14	3	0	67	33
Drafting/Technical	14	3	0	33	67
Apprenticeship Auto	10	2	0	100	0
Bank Teller	10	2	50	50	0
Business Machine Repair	10	2	0	50	50
Drafting/Architectural	10	2	0	100	0
Microprocessor Technician	10	2	0	50	50
Lasar Disc Technology	10	2	50	50	0

HEALTH SERVICES

Of the forty-two (42) employers sampled in this area, twenty-three (23) responded to the survey. This represents a fifty-five percent (55%) response rate.

As indicated in Figure 6, fifty-two percent (52%) of the responses were from small business, thirty-one percent (31%) from medium business and seventeen percent (17%) from large business which is significantly different than the overall response rates for Size of Business (Figure 1).

Figure 6



The occupational titles in this Cluster are displayed by ordinal ranking in Table 9. Several interrelated occupations were included in this Cluster and any program planning should make note of this: i.e., Dental Assistant, Dental Receptionist, Dental Technician.

Table 9

LIST OF OCCUPATIONS IN ORDER OF PREFERENCE

HEALTH SERVICES

OCCUPATIONAL AREA	TOTAL % OF CLUSTER RESPONSES	TOTAL # OF CLUSTER RESPONSES	% OF EMPLOYMENT NEED LOW	MEDIUM	HIGH
Nursing	57	13	15	8	77
Nursing Assistant	52	12	25	25	50
LVN-RN	48	11	9	18	73
Emergency Medical Technician	43	10	10	20	70
Dietetic Assistant	39	9	22	56	22
Medical Insurance Specialist	39	9	0	44	56
Medical Record Technologist	39	9	22	35	45
Home Health Assistant	30	7	28	43	29
Homemakers for Frail/ Elderly	30	7	28	43	29
Physical Therapy Assistant	30	7	14	57	29
Medical Assistant	26	6	0	50	50
Respiratory Therapy Assistant	26	6	50	17	33
Dental Assistant	26	6	33	17	50
Biomedical Technician	22	5	40	0	60
Dental Recep/Off Manager	22	5	40	0	60
Rehabilitative Recreation Leader	22	5	40	20	40
Sports Medicine	22	5	40	20	40
Optical Technician	17	4	50	0	50
Dental Technician	13	3	67	0	33
Auxiliary					
Clerical	57	13	0	54	46
Medical Secretary	52	12	0	33	67
Accounting	52	12	0	50	50
Business/General	43	10	0	80	20
Computer Science	43	10	10	60	30
Office Education	43	10	0	30	70
Computer Software	35	8	12	63	25
Word Processing	35	8	12	50	38
Public Relations	35	8	12	50	38
Supervision	35	8	0	37	63
Bookkeeping	30	7	0	29	71
Business Administration	30	7	0	29	71
Cook	30	7	0	29	71
Computer Programming	26	6	17	50	33
Building Maintenance	26	6	0	67	33
Executive Housekeeping	26	6	0	67	33
Systems Analysis	22	5	40	40	20
Marketing & Merchandising	22	5	33	0	67

Table 9 (Continued)

HEALTH SERVICES

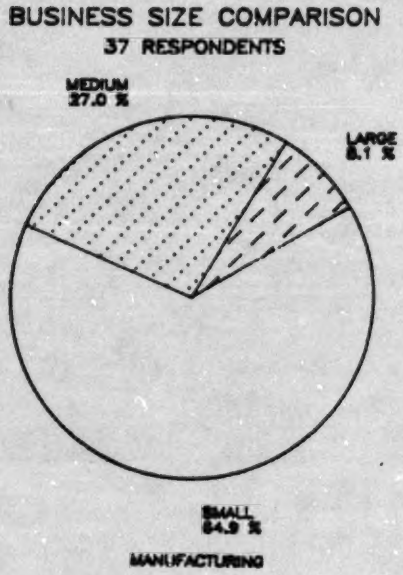
OCCUPATIONAL AREA	TOTAL % OF CLUSTER RESPONSES	TOTAL # OF CLUSTER RESPONSES	% OF EMPLOYMENT NEED		
			LOW	MEDIUM	HIGH
Food & Beverage Management	22	5	0	100	0
Advertising	17	4	25	25	50
Banking & Finance	17	4	25	50	25
Mid-Management	17	4	0	50	50
Shipping & Receiving	17	4	25	75	0
Small Business Management	17	4	0	50	50
Journalism	17	4	25	25	50
Carpentry	17	4	25	75	0
Electrician	17	4	25	75	0
Institutional Food	17	4	0	50	50
Gerontology	17	4	0	50	50
Legal Secretary	13	3	33	67	0
Plumbing & Pipefitting	13	3	33	67	0
Chef	13	3	0	33	67
Janitorial	13	3	0	67	33
Credit & Lending	9	2	50	50	0
Biomedical Technician	9	2	0	0	100
Machine Tool Operator	9	2	0	100	0
Prep Cook	9	2	0	100	0
Recreation Leader	9	2	0	50	50
Technical Photography	9	2	50	50	0
Telecommunications	9	2	0	50	50
Air Conditioning & Refrigeration	9	2	0	100	0
Operating Engineer	9	2	0	100	0
Customer Service	9	2	0	50	50
Fire Science	9	2	50	50	0

MANUFACTURING

The response rate for this Occupational Cluster was thirty-eight percent (38%). A total of ninety-seven (97) employers were sampled with thrity-seven (37) replies.

As presented in Figure 7, the largest number of replies were received from small business.

Figure 7



The ordinal ranking of occupational titles within this Cluster is presented in Table 10. A significant difference in the ranking of Auxiliary needs should be noted. It appears that computerization may be more prevalent in this Cluster than any of the others.

Table 10

LIST OF OCCUPATIONS IN ORDER OF PREFERENCE

MANUFACTURING

OCCUPATIONAL AREA	TOTAL % OF CLUSTER RESPONSES	TOTAL # OF CLUSTER RESPONSES	% OF EMPLOYMENT NEED		
			LOW	MEDIUM	HIGH
Quality Assurance	57	21	19	38	43
Machine Tool Operator	49	18	16	6	78
Drafting/Technical	46	17	12	41	47
Electronics	46	17	6	29	65
Computer Assisted Manuf	43	16	31	13	56
Microprocessor Technician	43	16	25	31	44
Digital & Computer Elect. Technician	41	15	20	13	67
Field Service Technician	41	15	26	27	47
Electronics Technician	41	15	20	20	60
Numerical Control Operator	41	15	20	20	60
Drafting	38	14	0	29	71
Drafting/Mechanical	38	14	7	36	57
Computer Assisted Drafting	35	15	23	31	46
Cons Elect Rep Tech	32	12	42	16	42

Table 10 (Continued)

MANUFACTURING

OCCUPATIONAL AREA	TOTAL % OF CLUSTER RESPONSES	TOTAL # OF CLUSTER RESPONSES	% OF EMPLOYMENT NEED LOW	MEDIUM	HIGH
Robotics Maint. & Repair Technician	32	12	33	25	42
Automated Procedd Control Maint. & Repair Tech.	30	11	27	55	18
Drafting/Architectural	24	9	33	22	45
Plastics Fabrication	22	8	62	38	0
Business Machine Repairs	22	8	88	12	0
Biomedical Instrumentation Technician	19	7	100	0	0
Lasar Disc Technology	16	6	50	17	33
Auxiliary					
Office Education/Clerical	51	19	5	42	53
Word Processing	51	19	0	47	53
Accounting	46	17	6	47	47
Computer Sciences	41	15	0	13	87
Computer Software	41	15	0	33	67
Computer Programming	38	14	7	29	64
Supervision	38	14	7	43	50
Computer System Analysis	35	13	8	38	54
Business Administration	35	13	15	46	39
Marketing & Merchandising	35	13	8	46	46
Office Education	35	13	8	69	23
Business/General	32	12	8	67	25
Shipping and Receiving Clerk Warehouseman	32	12	8	42	50
Small Business	30	11	9	64	27
Bookkeeping	27	10	0	70	30
Advertising	27	10	10	50	40
Mid-Management	27	10	10	60	30
Sheetmetal	19	7	28	29	43
Electrician	16	6	33	50	17
Welding	16	6	17	33	50
Construction Technology	14	5	20	60	20
Public Relations	14	5	0	40	60
Cabinetmaking & Millwork	14	5	40	40	20
Carpentry	14	5	20	60	20
Construction Inspection	14	5	20	60	20
Air Conditioning & Refrigeration	11	4	25	50	25
Building Maintenance	11	4	0	75	25
Plumbing & Pipefitting	11	4	25	50	25
Roofing	11	4	25	50	25
Surveying	11	4	25	75	0
Legal Secretary	11	4	25	50	25
Banking and Finance	8	3	0	33	67
Medical Secretary	8	3	33	33	33
Retail Sales	8	3	33	0	67
Operating Engineer	8	3	0	67	33
Credit and Lending	5	2	0	100	0

Table 10 (Continued)

MANUFACTURING

OCCUPATIONAL AREA	TOTAL % OF CLUSTER RESPONSES	TOTAL # OF CLUSTER RESPONSES	% OF EMPLOYMENT NEED LOW	MEDIUM	HIGH
Real Estate	5	2	50	0	50
Commerical Art	5	2	50	50	0
Illustration	5	2	50	50	0
Graphic Communication	5	2	50	50	0
Animation	5	2	50	50	0

CONSUMER & HOMEMAKING

Thirty-one employers (31) in this Occupational Cluster were sampled. A total of eight (8) employers returned the survey for a twenty-six percent (26%) rate of response. Therefore, caution is recommended in drawing specific conclusions as this sample is small.

In correlating size of business it was determined that size of business varied significantly from the overall correlation as indicated in Figures 1 and 8.

Figure 8

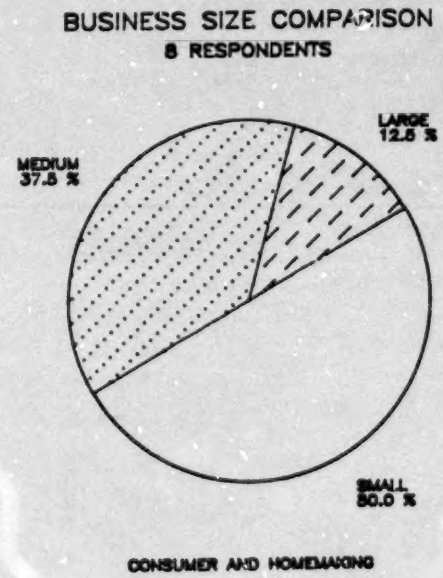


Table 11 presents an ordinal ranking of occupations within this Cluster Area. Although a small number of employers responded it should be noted they indicated a high need in those occupational titles listed (100%). These

occupational titles also appeared as Auxiliary needs in several other Cluster Areas and this should be considered in planning.

Table 11

LIST OF OCCUPATIONS IN ORDER OF PREFERENCE

CONSUMER & HOMEMAKING

OCCUPATIONAL AREA	TOTAL % OF CLUSTER RESPONSES	TOTAL # OF CLUSTER RESPONSES	% OF EMPLOYMENT NEED LOW	MEDIUM	HIGH
Interior Design	37	3	0	0	100
Fashion Merchandising	25	2	0	0	100
Customer Service	25	2	0	0	100
Auxiliary					
Business Administration	88	7	14	43	43
Marketing & Merchandising	88	7	0	29	71
Bookkeeping	75	6	0	17	83
Retail Sales	75	6	0	0	100
Accounting	63	5	20	0	80
Business/General	63	5	0	60	40
Supervision	63	5	0	40	60
Advertising	50	4	0	50	50
Clerical	50	4	25	0	75
Public Relations	50	4	0	50	50
Ship/Rec Clerk Warehouseman	38	3	33	33	33
Small Business	38	3	0	0	100
Mid-Management	25	2	0	0	100
Office Education	25	2	0	0	100

HOSPITALITY AND RECREATION

There were eighty-two (82) employers surveyed in this Occupational Area. A response rate of twenty-six percent (26%) was obtained, representing twenty-one (21) employers.

Figure 9 indicates the correlation between size of business and those employers sampled who returned surveys.

Figure 9

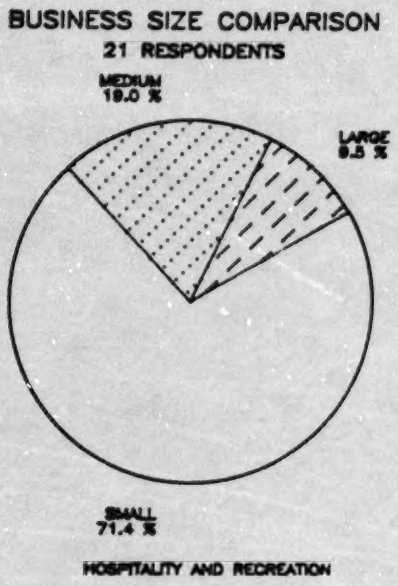


Table 12 presents a listing of ordinal ranking of the occupational titles within the Hospitality and Recreation Cluster. It should be noted that Management and Supervision needs appear in both the Cluster and Auxiliary needs section.

Table 12

LIST OF OCCUPATIONS IN ORDER OF PREFERENCE

HOSPITALITY & RECREATION

OCCUPATIONAL AREA	TOTAL % OF CLUSTER RESPONSES	TOTAL # OF CLUSTER RESPONSES	% OF EMPLOYMENT NEED		
			LOW	MEDIUM	HIGH
Restaurant Management	48	10	10	20	70
Chef	34	7	0	29	71
Cook	34	7	0	43	57
Food & Beverage Management	34	7	0	29	71
Travel Service	34	7	29	29	42
Prep Cook	29	6	0	67	33
Recreation Leader	29	6	33	50	17
Recreation Agency Leader	24	5	40	40	20
Executive Housekeeping	19	4	0	25	75
Hotel Desk Clerk	19	4	0	25	75
Hotel/Motel Management	19	4	0	25	75
Parks & Recreation Mgmt.	19	4	0	50	50
Institutional Foods Service Management	14	3	33	33	33

Table 12 (Continued)

HOSPITALITY & RECREATION

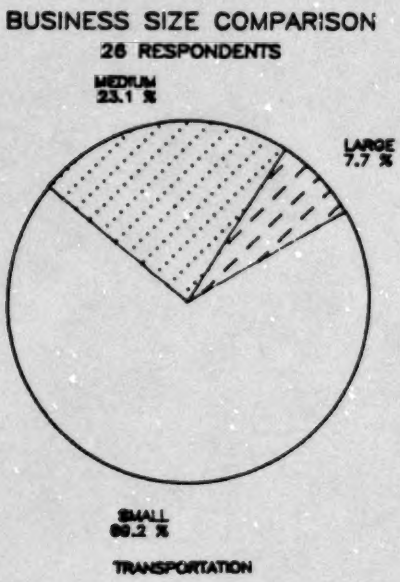
OCCUPATIONAL AREA	TOTAL % OF CLUSTER RESPONSES	TOTAL # OF CLUSTER RESPONSES	% OF EMPLOYMENT NEED LOW	MEDIUM	HIGH
Auxiliary					
Accounting	62	13	15	54	31
Public Relations	62	13	0	46	54
Supervision	52	11	0	45	55
Advertising	43	9	0	78	22
Bookkeeping	38	8	0	50	50
Small Business Management	28	6	0	50	50
Building Maintenance	28	6	0	84	16
Apprenticeship Plumbing	24	5	0	60	40
Business Administration	24	5	0	80	20
Business / General	24	5	0	80	20
Computer Software	24	5	0	80	20
Computer Programming	24	5	0	80	20
Marketing & Merchandising	24	5	0	80	20
Clerical	24	5	0	40	60
Retail Sales	24	5	20	20	60
Carpentry	24	5	40	60	0
Customer Service	24	5	0	60	40
Plumbing	23	5	40	60	0
Computer Science	20	4	0	50	50
Apprenticeship Carpentry	14	3	33	67	0
Office Education	14	3	0	100	0
Commercial Art	14	3	0	66	34
Air Conditioning & Refrigeration	14	3	34	0	66
Cabinetmaking & Millwork	14	3	66	34	0
Welding	14	3	34	66	0
Mechanic / General	14	3	0	67	33
Motorcycles / Small Engine Repair	14	3	0	67	33
Computer Systems Analysis	10	2	0	100	0
Credit & Lending	10	2	0	50	50
Mid-Management	10	2	0	100	0
Illustration	10	2	0	100	0
Journalism	10	2	50	50	0
Construction Inspection	10	2	100	0	0
Construction Technology	10	2	100	0	0
Electrician	10	2	50	50	0
Operating Engineer	10	2	100		
Roofing	10	2	100	0	0
Sheetmetal	10	2	100	0	0
Janitorial	10	2	0	50	50
Sports Medicine	10	2	50	50	0
Diesel/Heavy Duty	10	2	0	50	50

TRANSPORTATION

Of the sixty-six (66) employers sampled in this Cluster Area, twenty-six (26) returned responses. The percent of return was thirty-nine (39%).

As displayed in Figure 10, the response by size of business for this Cluster is closely correlated with the overall response as related to business size.

Figure 10



An ordinal ranking of occupational titles indicated by employers in the Transportation Cluster is presented in Table 13. Although Apprenticeship was not specifically listed it should be noted that a significant response was indicated under Auxiliary needs for Apprenticeship Automotive and Auto Body.

Table 13

LIST OF OCCUPATIONS IN ORDER OF PREFERENCE

TRANSPORTATION

OCCUPATIONAL AREA	TOTAL % OF CLUSTER RESPONSES	TOTAL # OF CLUSTER RESPONSES	% OF EMPLOYMENT NEED		
			LOW	MEDIUM	HIGH
Mechanic/General	62	16	6	38	56
Tune-Up & Engine Analysis	38	10	10	20	70
Diesel Mechanic/Auto	35	9	22	11	67
Commercial Pilot	35	9	33	11	56

Table 13 (Continued)

TRANSPORTATION

OCCUPATIONAL AREA	TOTAL % OF CLUSTER RESPONSES	TOTAL # OF CLUSTER RESPONSES	% OF EMPLOYMENT NEED LOW	MEDIUM	HIGH
Automotive Body Work	31	8	25	12	63
Chassis & Drive Lines	31	8	13	37	50
Airport Management Assistant	27	7	43	0	57
Diesel Mechanic/Heavy Duty	26	6	50	17	33
Auto Upholstery	23	6	33	33	33
Airport Operations	23	6	33	17	50
Aeronautical	19	5	0	40	60
Air Traffic Control Spec	19	5	40	0	60
Motorcycle/Small Eng Repair	15	4	50	0	50
Auxiliary					
Accounting	54	14	21	21	58
Apprenticeship Automotive	46	12	33	17	50
Bookkeeping	38	10	0	50	50
Small Business	35	9	0	33	67
Welding	31	8	0	50	50
Clerical	31	8	26	37	37
Public Relations	31	8	13	25	62
Office Education	27	7	14	28	58
Business/General	27	7	0	29	71
Apprenticeship Auto Body	23	6	17	17	66
Supervision	23	6	17	50	33
Advertising	23	6	33	17	50
Business Administration	23	6	0	17	83
Marketing & Merchandising	23	6	0	33	67
Ship/Rec Clerk Warehouseman	19	5	20	40	40
Computer Science	19	5	60	20	20
Computer Programming	19	5	60	20	20
Building Maintenance	15	4	25	50	25
Carpentry	15	4	25	50	25
Computer Software	15	4	50	25	25
Retail Sales	15	4	25	0	75
Mid-Management	15	4	25	25	50
Computer Systems Analysis	12	3	67	0	33
Word Processing	12	3	33	0	67
Customer Service	12	3	33	0	67
Apprenticeship Carpentry	8	2	100	0	0
Apprenticeship Plumbing	8	2	0	100	0
Apprenticeship Roofing	8	2	100	0	0
Entrepreneurship	8	2	0	0	100
Banking & Finance	8	2	50	50	0
Bank Management	8	2	0	50	50
Electrician	8	2	0	100	0
Legal Secretary	8	2	100	0	0

PUBLIC SERVICES

This Cluster Area obtained a sixty-seven percent (67%) rate of return. Sixty-one (61) employers were sampled with forty-one (41) of them returning surveys. Figure 11 presents the correlation of size of business and those employers who responded in this Cluster Area.

Figure 11

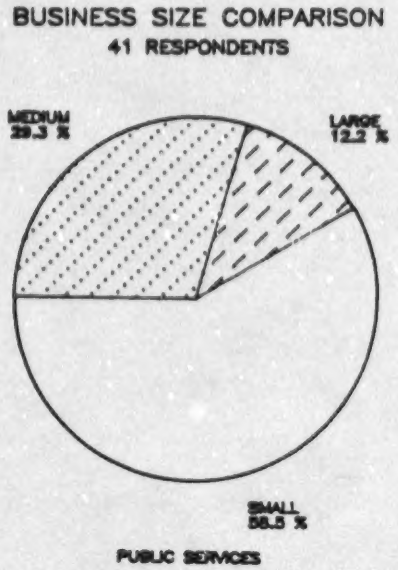


Table 14 provides an ordinal ranking of cluster occupational titles. The Criminal Justice area was broken down into several specific occupational titles. Although the raw number for these titles is the same, it should be noted that the responses were from several businesses and the total is coincidental. The long listing of Auxiliary needs can be related to the variety of business functions included in this Cluster Area.

Table 14

LIST OF OCCUPATIONS IN ORDER OF PREFERENCE

PUBLIC SERVICES

OCCUPATIONAL AREA	TOTAL % OF CLUSTER RESPONSES	TOTAL # OF CLUSTER RESPONSES	% OF EMPLOYMENT NEED		
			LOW	MEDIUM	HIGH
Child Development	27	11	18	18	64
Fire Science	24	10	30	30	40
Gerontology	20	8	25	12	63
Instructional Aide/Bilingual	20	8	38	50	12

Table 14 (Continued)

PUBLIC SERVICES

OCCUPATIONAL AREA	TOTAL % OF CLUSTER RESPONSES	TOTAL # OF CLUSTER RESPONSES	% OF EMPLOYMENT NEED LOW	MEDIUM	HIGH
Criminal Justice	20	8	12	25	63
Industrial Security	20	8	25	25	50
Investigative Security	20	8	25	37	38
Safety & Security Management	20	8	37	25	38
Security Guard	20	8	38	12	50
Law Enforcement	17	7	57	14	29
Library Technician	17	7	29	42	29
Instructional Aide/Elmen	15	6	66	34	0
Nuclear Security	15	6	66	17	17
Retail Security	15	6	33	33	33
Public Administration	15	6	0	50	50
Instructional Aide/ Spec Ed	7	3	66	34	0
Auxiliary					
Clerical	46	19	10	32	58
Accounting	34	14	21	43	36
Supervision	32	13	8	62	30
Public Relations	27	11	28	36	36
Office Education	27	11	28	27	45
Business Administration	27	11	9	64	27
Mid-Management	22	9	22	44	34
Computer Science	20	8	13	50	37
Word Processing	20	8	25	25	50
Bookkeeping	17	7	43	14	43
Computer Programming	15	6	17	33	50
Emergency Medical Technician	15	6	0	34	66
Recreation Leader	15	6	33	17	5
Business/General	12	5	20	60	20
Computer Software	12	5	40	20	40
Marketing & Merchandising	12	5	20	40	40
Building Maintenance	12	5	20	60	20
Janitorial	12	5	20	60	20
Chef	12	5	20	40	40
Recreation Agency Leader	12	5	40	0	60
Advertising	10	4	50	25	25
Computer Systems Analysis	10	4	25	50	25
Ship/Rec Clerk Warehouseman	10	4	75	25	0
Home Health Aide	10	4	25	50	25
LVN to RN	10	4	25	50	25
Homemakers for Frail Elderly	10	4	50	25	25
Parks & Recreation	10	4	50	0	50
General Elect Technician	7	3	34	0	66
Banking & Finance	7	3	0	100	0
Legal Secretary	7	3	0	66	34
Cook	7	3	33	33	33
Journalism	7	3	0	66	34
Technical Photography	7	3	34	66	0
Electrician	7	3	34	66	0
Nurse Assistant	7	3	33	33	33
Nursing	7	3	34	66	0

Table 14 (Continued)

LIST OF OCCUPATIONS IN ORDER OF PREFERENCE

PUBLIC SERVICES

OCCUPATIONAL AREA	TOTAL % OF CLUSTER RESPONSES	TOTAL # OF CLUSTER RESPONSES	% OF EMPLOYMENT NEED LOW	MEDIUM	HIGH
Rehabilitative Rec Leader	7	3	34	0	66
Institutional Food Service Mgmt/Conv Homes/Hosp/Schls	7	3	34	0	66
Restaurant Management	7	3	33	33	33
Travel Service	7	3	66	0	34
Drafting/Mechanical	7	3	0	100	0
Executive Housekeeping	5	2	100	0	0
Hotel Desk Clerk	5	2	100	0	0
Apprenticeship Carpentry	5	2	0	100	0
Apprenticeship Plumbing	5	2	0	100	0
Credit & Lending	5	2	50	0	50
Medical Secretary	5	2	50	50	0
Graphic Comm/Production	5	2	0	100	0
Graphic Comm/Printer	5	2	0	100	0
Sports Medicine	5	2	50	0	50
Air Conditioning and Refrigeration	5	2	0	0	100
Carpentry	5	2	0	100	0
Plumbing & Pipefitting	5	2	0	100	0
Hotel/Motel Management	5	2	100	0	0
Prep Cook	5	2	50	50	0
Drafting	5	2	0	100	0
Mechanic/General	5	2	0	100	0

OVERALL

Table 3 provides an ordinal ranking by program/occupational title of all responses. The data to the right of each title indicate the following:

Column 1 Of all responses received total percent of employers indicating a need;

Column 2 The actual raw number of all employers indicating that title;

Columns 3-5 Of the employers who marked the title, the percent of employment need ranked by 1 - low, 2 - medium, 3 - high.

For example: Fifty-one percent (51%) of the employers indicated a need for Accounting in their business. This percent represents a raw number of one hundred thirty (130). Of the one hundred thirty (130) employers who indicated a need for Accounting, eleven percent (11%)

indicated a low need; forty-two percent (42%) indicated a medium need; and forty-seven percent (47%) indicated a high need.

ADDITIONAL INFORMATION

According to the San Diego Association of Governments and the Department of Finance, State of California, the thrust of population growth in San Diego County from 1983 through the turn of the century will take place in North County. Table 15 indicates projected growth within cities in the Palomar Community College District.

Table 15

PROJECTED GROWTH - PALOMAR COMMUNITY COLLEGE DISTRICT

	1970 (Census)	1980 (Census)	1983 (Est.)	2000 (Proj.)	1983-2000 (Est. % Chg.)
Escondido	36,800	64,400	72,200	88,900	23
San Marcos	3,900	17,500	18,500	38,400	108
Vista	24,700	35,800	40,550	46,000	13
Poway*	14,000	34,300	35,300	61,400	74

*Unincorporated prior to 1980, 1970 figure is an estimate.

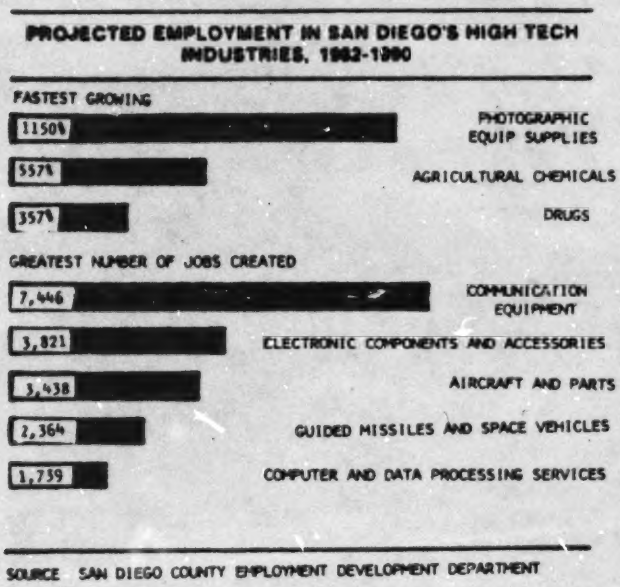
To ensure coordintion of educational opportunities, the Dean of Vocational Education is a member of the San Diego/Imperial Counties Occupational Deans Association and the North County Employment and Training Partnership. In addition, the Director of Regional Occupation Programs at Palomar College is a member of the ROP North County Planning Council.

As reported in The Union Tribune Review of San Diego Economic Activity (Volumn XXXIII, Number 1, March 1984), employment in high technology industries will increase substantially faster over the next decade than will general employment. However, as these industries have a small employment base, numerically these jobs will be relatively few. The bulk of newly created jobs expected to be in the non-high-tech industries.

Of the more than 200,000 new jobs forecast to be added to San Diego's employment rolls by 1990, the San Diego County Employment Development

Department expects more than 26,000 jobs in the high-tech category. Thus, locally, high-tech will account for about thirteen percent (13%) of all new jobs created. Figure 12 represents projected employment in San Diego's high-tech industries:

Figure 12



Small Businesses Provide First Jobs. Small businesses are more likely than large firms to hire women, youths, older and part-time workers, and people who are out of work, a study says.

The Small Business Administration study, the first to view labor force characteristics by size of firm, found two of three workers' first jobs were in small businesses - those with fewer than 100 employes. The study, based in part on a 1979 Census Bureau survey of about 60,000 households, shows an estimated 14 million small businesses in the USA are concentrated in construction, retail and wholesale trade and services.

Among the findings:

* 11.9% of the workers in the smallest firms - those with fewer than 25 employes - were 16 to 19 years old, compared with 6.1% for businesses

of 500 or more workers.

* About 4% of employes in the smallest firms were older than 65; only 0.5% were that old in the big companies.

* At the smallest companies, 56% of the employes were in the prime working age of 25 to 54; at firms with 500 or more employes, 67% were in that category.

* 43.2% of workers at firms with fewer than 25 employes were women, compared with 36.3% for big companies.

* At the smallest firms, 53.6% of the employes worked full time, compared with three-quarters of the employes at the biggest companies.

* Pay levels vary with a firm's size. More than 60% of workers in the smallest firms earned less than $5 an hour; about one-third were in that category at the big companies.

(Reprinted from USA Today, March 1984)

NEED FOR FURTHER STUDY

This Needs Assessment is one component in comprehensive Vocational Education planning. Further studies will need to follow as listed below:

1. A study to analyze the interest of students and potential students in occupational programs;
2. A study should be undertaken to determine what areas may not have responded to the Needs Assessment and a follow-up survey conducted;
3. It is suggested that another Needs Assessment be conducted in three (3) years.

APPENDICES

TITLE	APPENDIX
LIST OF EMPLOYERS	A
FIVE YEAR PLAN	B
SURVEY INSTRUMENT	C
COVER LETTER	D

A E C San Diego
Escondido, CA 92025

Action Machining Co.
San Marcos, CA 92069

Ad Laser, Inc.
San Marcos, CA 92069

Adia Temporary Services
San Marcos, CA 92069

Aerial Fotobank
San Diego, CA 92064

Air Resorts Airlines
Carlsbad, CA 92008

Aldrodge Associates Architecture
Escondido, CA 92025

All Seasons Construction Co,
Escondido, CA 92025

Allen's Audio & Video
San Marcos, CA 92069

Allied Home Health Associates
San Marcos, CA 92069

American Cancer Society
San Marcos, CA 92069

American Red Cross
Escondido, CA 92025

Analytical Research Associates
Valley Center, CA 92082

Apex Import Garage
San Marcos, CA 92069

Ardan Catalog Showrooms
Escondido, CA 92025

Armorlite, Inc.
San Marcos, CA 92069

Aspen Design Group
Ramona, CA 92065

B & B Engineers, Civil &
Construction
Vista, CA 92083

BBS Truck & Equipment, Inc.
Escondido, CA 92025

BC & Associates
San Marcos, CA 92069

Bank of America
Escondido, CA 92025

Barrel Service Company
San Marcos, CA 92069

Beverly Home Health Care
Escondido, CA 92025

Ron Bishop Motorcycles
Escondido, CA 92025

Brengle Terrace Park
Recreation Center
Vista, CA 92083

Buena Vista Business Systems
Vista, CA 92083

JR Brandt Interiors
Vista, CA 92083

Building Department,
City of Vista
Vista, CA 92083

Burroughs Corporation
San Diego, CA 92128

Burrows Construction Co., Inc.
Escondido, CA 92025

Burrows Southcoast Airport
Carlsbad, CA 92008

C & H Machine
Escondido, CA 92025

Cable TV-TM
Escondido, CA 92025

California Contact Lens Lab
La Mesa, CA 92041

California Plant Protection, Inc.
Escondido, CA 92025

Captial State Construction Co.
Escondido, CA 92025

Carlsbad Senior Citizens Association
Carlsbad, CA 92008

Carpenters District Council of San Diego AFLCIO
Vista, CA 92083

Carpenters Union Local #2070
Vista, CA 92083

Carter's Valley Welding
Valley Center, CA 92082

Castleman Associates, Ltd.
Escondido, CA 92025

Center for Leadership Studies
Escondido, CA 92025

Century 21 Mark Realtors
Escondido, CA 92025

Children's World Preschool
Poway, CA 92064

Circus World
Vista, CA 92083

City of Escondido Library
Escondido, CA 92025

City of Poway, Weingart Center
Poway, CA 92064

City of San Diego Library
Rancho Bernardo Branch
San Diego, CA 92128

Coast Graphics, Inc.
San Marcos, CA 92069

Conductive Products Company
Escondido, CA 92025

Cladan Technology, Inc.
San Marcos, CA 92069

Consultants to Business, Inc.
Vista, CA 92083

R. A. Cooper Machine Parts
San Marcos, CA 92069

Cord Industries
Fallbrook, CA 92028

Country Day School, Inc.
Vista, CA 92083

Cox Cable
San Diego, CA 92120

Craig Laboratories, Inc.
Escondido, CA 92025

Tom Daly, Illustrator
Escondido, CA 92025

Daniels Cablevision
Carlsbad, CA 92008

Data Strategies, Inc.
Escondido, CA 92025

Decom Systems, Inc.
San Marcos, CA 92069

Drs. DeJulien, Johnson & Woodcock
Escondido, CA 92025

Delta Air Lines, Inc.
San Diego, CA 92101

Distillery East
Escondido, CA 92025

Diversified Secretarial Service
San Marcos, CA 92069

Dixon Lake Recreation Area
Escondido, CA 92027

Dresselhaus Surveying
Valley Center, CA 92082

Dunrite Word Processing
Escondido, CA 92025

ERB Engineering, Inc.
Poway, CA 92064

EYE
Youth & Family Counseling
Escondido, CA 92025

Dr. James Eckhart
Vista, CA 92083

Electro-Tech Security
Poway, CA 92064

Elmore Dennis Construction
Fallbrook, CA 92028

Emergency Doctors Medical Center
Escondido, CA 92025

Escon Tool & Manufacturing, Inc.
San Marcos, CA 92069

Escondido Convalescent Center
Escondido, CA 92025

Escondido Drapery Studio
Escondido, CA 92025

Escondido Escrow Company
Escondido, CA 92025

Escondido Fire Department
Escondido, CA 92025

Escondido Police Department
Escondido, CA 92025

Esgil Corporation
San Diego, CA 92123

Executive Aviation Services
San Marcos, CA 92069

Fallbrook Air Service
Fallbrook, CA 92028

Fallbrook Auto Body & Paint
Fallbrooks, CA 92028

Fallbrook Child Development
Fallbrook, CA 92028

Fallbrook Golf & Country Club
Fallbrook, CA 92028

Fallbrook People to People
Fallbrook, CA 92028

Fallbrook Printing Corporation
Fallbrook, CA 92028

Fallbrook Senior Citizens Information
Fallbrook, CA 92028

Fallbrook Transmission Service
Fallbrook, CA 92028

First Interconnect
Solana Beach, CA 92075

First World Travel Center
Poway, CA 92064

Fluid Components, Inc.
San Marcos, CA 92069

Franciscan Inn
Fallbrook, CA 92028

Frontline Video, Inc.
Solana Beach, CA 92075

GA Technologies, Inc.
San Diego, CA 92101

GO Satellite Systems
San Marcos, CA 92069

Gemco Membership Department Store
Escondido, CA 92025

Glendale Federal
Escondido, CA 92025

Golfland
Escondido, CA 92025

Goodhew Ambulance Service
Escondido, CA 92025

Grandwood, Inc.
San Marcos, CA 92069

Graphics Image Group
Escondido, CA 92025

Donald F. Greist
Borrego Springs, CA 92004

H & J Welding
Escondido, CA 92025

Robert Hall Electrical
Fire Scene
Escondido, CA 92025

C E Heard Plumbing &
Appliances, Inc.
Escondido, CA 92025

Helios Distribution Co.
San Marcos, CA 92069

James Hernandes & Associates
San Marcos, CA 92069

Hidden Valley National Bank
Escondido, CA 92025

Home Savings of America
San Diego, CA 92128

House of Sweden
Poway, CA 92064

Hubotics, Inc.
Carlsbad, CA 92008

Hydrokinetics, Inc.
San Marcos, CA 92069

Iliff Thorn & Company
San Marcos, CA 92069

International Robomation
Intelligence
Carlsbad, CA 92008

Imperial Airlines
Carlsbad, CA 92008

Ivy's Typewriters
Escondido, CA 92025

Japanese Restaurant YAE
San Diego, CA 92128

Julian Sheriff's Department
Julian, CA 92036

Julian Volunteer Fire Co.
Julian, CA 92036

K & B Auto & Motorcycle
Repair
Vista, CA 92083

KAVO 107-1 FM Stereo
Fallbrook, CA 92028

KOWN Radio Station AM-FM
Escondido, CA 92025

Kallee Travel
Escondido, CA 92025

Katsu Seafood & Steak House
Escondido, CA 92025

Kelly Services
Escondido, CA 92025

Kenny's Kar Klinic
Vista, CA 92083

Kleinsmith Auto Clinic
Vist, CA 92083

La Costa Upholstery
San Marcos, CA 92069

Lake San Marcos Resort
Quail's Inn Motel
San Marcos, CA 92069

Larry's Foreign Car Repair
Vista, CA 92083

Lawrence Welk Village
Golf Course
Escondido, CA 92025

Lee's Injection Molders
Vista, CA 92083

Leming & Associates Land
Planning
Ramona, CA 92065

Libuse Graphics, Etc.
San Marcos, CA 92069

Lifeline Community Service
Vista, CA 92083

Lion & The Lamb Preschool
Escondido, CA 92025

Live Oak Escrow
Fallbrook, CA 92028

Lomack Service
Vista, CA 92083

Lund Enterprises
San Marcos, CA 92069

MAAC Project
Vista, CA 92083

M J L Machine Company
Escondido, CA 92025

Martin Metal Stamping Co.
Escondido, CA 92025

Marco Plumbing Company, Inc.
Poway, CA 92064

Marden-Susco
San Marcos, CA 92069

Masson & Amox, Inc.
Escondido, CA 92025

McDonald Home for Children
Ramona, CA 92065

Meccanisms
Vista, CA 92083

Melco Manor Business Service
Vista, CA 92083

Meziere Enterprises
Escondido, CA 92025

Micro Radian Instruments
San Marcos, CA 92069

Millidyne Service, Inc.
Ramona, CA 92065

Mission Auto Parts
Vista, CA 92083

Dr. James J. Mulder
Escondido, CA 92025

Patrick J. Murphy
Advertising, Inc.
Escondido, CA 92025

My Little World Preschool
Escondido, CA 92025

National Telephone Exchange
of North County
Escondido, CA 92025

Noah's Ark Learning Center
Vista, CA 92083

Node Computer Systems
San Marcos, CA 92069

North County Auto Body
Escondido, CA 92025

North County Electric
Vista, CA 92083

Norwest Financial
Escondido, CA 92025

Oaks North Travel
San Diego, CA 92128

Oasis Motel
Borrego Springs, CA 92004

Oceanside City Airport
Oceanside, CA 92054

P D Q Secretarial Service
Escondido, CA 92025

P & M Management Service
Vista, CA 92083

PSA
San Diego, CA 92101

Pacific International
Communications
San Marcos, CA 92069

Palomar Engineers
Escondido, CA 92025

Palomar Graphics Arts, Inc.
Carlsbad, CA 92008

Palomar Systems & Machines
Escondido, CA 92025

Parsonese Photography
Escondido, CA 92025

Phone Ware, Inc.
Escondido, CA 92025

Physicians Clinical Lab
Escondido, CA 92025

Pine Hills Mutual Water Co.
Julian, CA 92036

Plan for People
Julian, CA 92036

Polytech, Ltd.
San Marcos, CA 92069

Pomerado Hospital
Poway, CA 92064

Poway Auto Upholstery
Poway, CA 92064

Poway Police-Sheriff's Department
Poway, CA 92064

Poway Valley Senior Citizen, Inc.
Poway, CA 92064

Professional Energy Savers
Vista, CA 92083

Rainbow Municipal Water District
Fallbrook, CA 92028

Rancho Bernardo Convalescent
Poway, CA 92064

Rancho Bernardo Golf Club
San Diego, CA 92128

Ramona Airport
Ramona, CA 92065

Reborn Auto Body
San Marcos, CA 92069

Redwood Terrace Luteran Home
Escondido, CA 92025

Reliable Roof Company, Inc.
San Marcos, CA 92069

William Riddel, Model Maker
Vista, CA 92083

Dr. John Rimelspach
Escondido, CA 92025

Bill Robinson, Building Designer
Vista, CA 92083

Rocky Coast Solar
Valley Center, CA 92082

Rorick Buick
Carlsbad, CA 92008

S & H Tool & Die, Inc.
Rancho Bernardo, CA 92128

San Diego County Library
Fallbrook, CA 92028

San Diego County Library
San Marcos, CA 92069

San Diego Gas & Electric
Escondido, CA 92025

San Luis Rey Downs Golf-Tennis Resort & Country Club
Bonsall, CA 92003

San Marcos County Water District
San Marcos, CA 92069

San Marcos Engineering
San Marcos, CA 92069

San Marcos Fire Department
Vista, CA 92083

San Marcos Mill
San Marcos, CA 92069

San Marcos Senior & Trail Blazers
San Marcos, CA 92069

San Marcos Tool & Machine Work
San Marcos, CA 92069

Satellite Home Antenna Systems
Vista, CA 92083

Schaefer's Ambulance Service
La Mesa, CA 92041

Scripps Memorial Hospital-Encinitas
Encinitas, CA 92024

Sears Banking
Escondido, CA 92025

Security Pacific National Bank
Escondido, CA 92025

Senior Service Council of Escondido
Escondido, CA 92025

Shelhoup's Department Store
Vista, CA 92083

Shorty's Upholstery
Vista, CA 92083

Southcom International, Inc.
Escondido, CA 92025

Southwestern Cable TV
San Diego, CA 92101

Superior Air Conditioning Heating-Solar
Ramona, CA 92065

TRS 80 Micro-Computer
Poway, CA 92064

Frank Tanner, D.D.S.
Vista, CA 92083

Taurus Builders
Poway, CA 92064

Teledyne Aero-Cal
San Marcos, CA 92069

Ten Mar Corporation
dba: Taco Bell
Escondido, CA 92025

Dr. Daniel Tevrizian
San Marcos, CA 92069

The Canyon School
Vista, CA 92083

The Center Market
Borrego Springs, CA 92004

The Salvation Army
Escondido, CA 92025

The Westerner
Fallbrook, CA 92028

Tranetics, Inc.
Escondido, Ca 92025

Trebla Coporation
Fallbrook, CA 92028

Trend Management, Inc.
Vista, CA 92083

Tri-Care Child Development
Escondido, CA 92025

Tri-City Hospital
Oceanside, CA 92054

Tri-City Travel
Vista, CA 92083

Triple L Machining
Escondido, CA 92025

Try Enterprises, Inc.
Fallbrook, CA 92028

Twin Lakes Professional Plaza
San Marcos, CA 92069

Valley Center Municipal
Water District
Valley Center, CA 92082

Vista Irrigation District
Vista, CA 92083

Vista Jail
Vista, CA 92083

Vista Patrol
Vista, CA 92083

Volt Temporary Services
San Marcos, CA 92069

Wafford Plumbing
Valley Center, CA 92082

Waste Water Treatment Plant
Escondido, CA 92025

Water and Sewer Department
Oceanside, CA 92054

Waters Tax & Bookkeeping
Service
San Marcos, CA 92069

Weber Industries
Escondido, CA 92025

Wells Fargo Bank
San Diego, CA 92128

Welsh Drafting Service
Escondido, CA 92025

Western Airlines
San Diego, CA 92101

Western Image
San Marcos, CA 92069

Whispering Sands Motel
Borrego Springs, CA 92004

Kit Wilson Fine Woodworking
San Marcos, CA 92069

World Financial Services
Center, Inc.
Ocenaside, CA 92025

Wunderlin Engineering
Escondido, CA 92025

Xentex, Inc.
San Marcos, CA 92069

Zonic Corporation
Escondido, CA 92025

GOALS FOR VOCATIONAL EDUCATION IN CALIFORNIA

To provide leadership for vocational education in California, the following goals have been established for 1984-85 by the State Department of Education and Chancellor's Office of the California Community Colleges:

1. To stimulate the improvement of vocational education programs and services which incorporate appropriate basic and employability skills and new technological advances of business and industry
2. To implement a vocational education funding system that incorporates program/course approval and general and subject matter standards with appropriate minimum compliance criteria
3. To improve and expand linkages with the business and industry sectors, employment and training agencies, and other providers of vocational education programs and services
4. To ensure equal access to vocational education programs for all persons in all communities
5. To maintain and improve vocational education opportunities for special needs students
6. To develop instructional materials designed to prepare students for employment in existing, new, and emerging occupations
7. To develop the consumer and homemaking skills of individuals
8. To assist students in making occupational choices through improved counseling supported by an updated career guidance information system
9. To improve placement of students who have gained employable skills

BEST COPY AVAILABLE

10. To assist those already employed in the maintenance of previously acquired skills or in the development of new skills to advance or change employment fields

11. To broaden the participation of local vocational education personnel in the state vocational education agencies' planning and policymaking processes

12. To provide a comprehensive quality staff development program for vocational education personnel

13. To promote better coordination of federal and nonfederal funds in support of vocational programs and services

14. To increase the effectiveness and efficiency of the staffs of the Division of Vocational and Continuing Education and Chancellor's Office of the California Community Colleges in the administration of federal and state vocational education funds

NEEDS ASSESSMENT SURVEY

Directions: Please complete the questionnaire in as much detail as possible. If you have any questions, don't hesitate to call (see information at bottom). Upon completion please return the survey in the envelope provided.

---

1. Company Name: _____

2. Company Address: _____

3. Telephone No.: _____

4. Name and Title of person completing survey: _____

_____

5. Total number of employees in the Company (branch): _____

6. Please list the main purpose of your company, such as manufacturing computers, auto repair, health care, restaurant, etc.:

_____

_____

Project Director: Dr. Ed J. Muraski
Dean of Vocational Education
Palomar Community College
1140 W. Mission Road
San Marcos, CA 92069
(619) 744-1150 Ext. 2278

Project Coordinator: Cherie Barker
Director
Palomar Community College

ALL RESPONSES WILL BE CONSIDERED CONFIDENTIAL

BEST COPY AVAILABLE

7. Following is a list of the Programs and/or Occupational areas for which Palomar Community College offers training. Look at all the programs first and then rank them according to their importance to your employment needs by circling either: 1 - Low, 2 - Medium, 3 - High. Remember to grade only those programs that apply to your own business. In addition, add any programs you feel we should consider in the next five years and how many employees you would hire from that program.

Low	Medium	High	
			APPRENTICESHIP
1	2	3	Automotive
1	2	3	Auto Body
1	2	3	Carpentry
1	2	3	Millwright
1	2	3	Pipefitting
1	2	3	Plumbing
1	2	3	Roofing
			BUSINESS AND CLERICAL
1	2	3	Accounting
1	2	3	Bookkeeping
1	2	3	Advertising
1	2	3	Banking & Finance
1	2	3	Bank Management
1	2	3	Bank Operations
1	2	3	Bank Teller
1	2	3	Business Administration
1	2	3	Business, General
1	2	3	Computer Science
1	2	3	Computer Software
1	2	3	Programming
1	2	3	Systems Analysis
1	2	3	Credit & Lending
1	2	3	Escrow
1	2	3	Marketing & Merchandising
1	2	3	Mid-Management
1	2	3	Office Education
1	2	3	Clerical
1	2	3	Legal Secretary
1	2	3	Medical Secretary
1	2	3	Word Processing
1	2	3	Public Relations
1	2	3	Real Estate
1	2	3	Retail Sales
1	2	3	Shipping & Receiving Clerk/Warehouseman
1	2	3	Small Business Manager
1	2	3	Supervision
			COMMUNICATIONS & MEDIA
1	2	3	Commercial Art
1	2	3	Illustration
1	2	3	Graphic Communications
1	2	3	Graphic Communications Production
1	2	3	Graphic Communications Printer
1	2	3	Journalism
1	2	3	Technical Photography
1	2	3	Telecommunications
1	2	3	Television Broadcast Electronics
1	2	3	Recording Studio Technician
1	2	3	Animation

Low	Medium	High	
			CONSTRUCTION
1	2	3	Air Conditioning & Refrigeration
1	2	3	Building Maintenance
1	2	3	Cabinetmaking & Millwork
1	2	3	Carpentry
1	2	3	Construction Inspection
1	2	3	Construction Technology
1	2	3	Electrician
1	2	3	Operating Engineer
1	2	3	Plumbing & Pipefitting
1	2	3	Roofing
1	2	3	Sheetmetal
1	2	3	Welding
			CONSUMER & HOMEMAKING
1	2	3	Customer Service
1	2	3	Demonstrators
1	2	3	Entrepreneurship
1	2	3	Fashion Design
1	2	3	Fashion Manufacturing
1	2	3	Fashion Merchandising
1	2	3	Interior Design
1	2	3	Janitorial
1	2	3	Production Sewing
1	2	3	Upholstery
			ENVIRONMENT
1	2	3	Surveying
1	2	3	Solar Energy Technician
1	2	3	Wastewater Treatment
1	2	3	Water Treatment
			HEALTH
1	2	3	Biomedical Technician
1	2	3	Dental Assisting
1	2	3	Dental Receptionist/Office Manag
1	2	3	Dental Technician
1	2	3	Dietetic Assistant
1	2	3	Emergency Medical Technician
1	2	3	Home Health Aide
1	2	3	Medical Assisting
1	2	3	Medical Insurance Specialist
1	2	3	Medical Record Technologist
1	2	3	Nurse Assistant
1	2	3	Nursing
1	2	3	LVN to RN
1	2	3	Optical Technician
1	2	3	Rehabilitative Recreation Leader
1	2	3	Sports Medicine
1	2	3	Homemakers for Frail Elderly
1	2	3	Physical Therapy Assistant
1	2	3	Respiratory Therapy Assistant

BEST COPY AVAILABLE

Low	Medium	High	HOSPITAL & RECREATION
1	2	3	Chef
1	2	3	Cook
1	2	3	Executive Housekeeping
1	2	3	Food & Beverage Management
1	2	3	Hotel Desk Clerk
1	2	3	Hotel/Motel Management
1	2	3	Institutional Food Service Mgmt. Convalescent Homes, Hosp., Schools
1	2	3	Parks & Recreation Management
1	2	3	Prep Cook
1	2	3	Recreation Agency Leader
1	2	3	Recreation Leader
1	2	3	Restaurant Management
1	2	3	Travel Service

			MANUFACTURING
1	2	3	Automated Process Control Maint. & Repair Tech.
1	2	3	Biomedical Instrumentation Technician
1	2	3	Business Machine Reapirs
1	2	3	Computer-Aided Drafting
1	2	3	Computer Assisted Manufacturing
1	2	3	Drafting
1	2	3	Architectural
1	2	3	Mechanical
1	2	3	Technical
1	2	3	Electronics
1	2	3	Consumer Elect. Equip. Repair
1	2	3	Digital & Computer Elect. Tech.
1	2	3	Field Service Technician
1	2	3	General Electronics Tech.
1	2	3	Microprocessor Technician
1	2	3	Lasar Disc Technology
1	2	3	Machine Tool Operator
1	2	3	Numerical Control Operator
1	2	3	Plastics Fabrication
1	2	3	Quality Assurance Technology
1	2	3	Robotics Maint. & Repair Tech.

COMMENTS OR SUGGESTIONS:

Low	Medium	High	PUBLIC SERVICES
1	2	3	Child Development
1	2	3	Instructional Aide - Bilingual
1	2	3	Instructional Aide - Elementary
1	2	3	Instructional Aide - Special Ed
1	2	3	Criminal Justice
1	2	3	Industrial Security
1	2	3	Investigative Security
1	2	3	Law Enforcement
1	2	3	Nuclear Security
1	2	3	Retail Security
1	2	3	Safety & Security Management
1	2	3	Security Guard
1	2	3	Fire Science
1	2	3	Gerontology/Geriatrics
1	2	3	Library Technician
1	2	3	Public Administration

			TRANSPORTATION
1	2	3	Automotive Body Work
1	2	3	Auto Upholstery
1	2	3	Chassis & Drive Lines
1	2	3	Diesel Mechanic - Auto
1	2	3	Diesel Mechanic - Heavy Duty
1	2	3	Mechanic - General
1	2	3	Motorcycle & Small Engine Repair
1	2	3	Tune-up & Engine Analysis
1	2	3	Aeronautical
1	2	3	Air Craft Commercial Pilot
1	2	3	Airport Management Assistant
1	2	3	Air Traffic Control Specialist
1	2	3	Operations

NEW PROGRAMS:

1 2 3 _____

1 2 3 _____

1 2 3 _____

1 2 3 _____

BEST COPY AVAILABLE

Palomar College

San Marcos, California 92069-1487 Phone (619) 744-1150
DR. OMAR H. SCHEIDT, Superintendent/President
DR. ED J. MURASKI, Dean of Vocational Education, Ext. 2276

March 6, 1984

Dear Employer:

You are probably aware that Palomar Community College provides many vocational programs designed to prepare employees for your company and others in the North San Diego County and the surrounding areas.

In order for us to determine the need for new programs or the revision or deletion of programs, it is very important that we have your company's suggestions and recommendations. You are, therefore, kindly requested to complete the enclosed survey form, which may be completed in approximately ten minutes. The success of the Needs Assessment depends, in a large measure, upon your response, especially since we are using a sample of companies rather than all companies.

A self-addressed envelope has been enclosed for your convenience in returning the completed survey.

Please take a few moments to help us help you in the future.

Sincerely,

Omar H Scheidt

DR. OMAR H. SCHEIDT
Superintendent/President
Palomar Community College

E J Muraski

DR. ED. J. MURASKI, Dean
Vocational Education
Palomar Community College

OHS:EJM/mb

encl.

BEST COPY AVAILABLE

GOVERNING BOARD Dr William D Bowce, Allan R Erickman, Charles W Salter, Dr Arman K Simonian, James I Stewart
Student Trustee, President of the Associated Students

ERIC Clearinghouse for Junior Colleges
AUG 8 1985